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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/658,440

09/08/2003

John V. Smith

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07/20/2004

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EXAMINER

CHANG, YEAN HSI

ART UNIT

PAPER NUMBER

2835

DATE MAILED: 07/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/658,440

Applicant(s)

SMITH ET AL.

Examiner

Yean-Hsi Chang

Art Unit

2835

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 June 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>6/17/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claims 1 and 14 are objected to because of the following informalities: In line 6 of claim 1, "N" lacks antecedent basis; and in line 2 of claim 14, "bout" should be "about" to make sense. Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 2 is rejected under 35 U.S.C. 102(b) as being anticipated by Casanova et al. (US 5,031,075).

Casanova teaches an electronic component rack assembly (fig. 2) comprising: a rack housing (20, fig. 2) having a width W_r (not shown), where W_r is equal about 24 inches (see col.3, lines 30-31; 24 inches is a standard width of EIA rack), a group of N number of electronic components (42, fig. 3) mounted side-by-side, upright in a series of spaced-apart vertical planes on the rack housing (shown in fig. 3), another group of N number of electronic components (42, fig. 3) mounted side-by-side, upright in a series of spaced-apart vertical planes on the rack housing (shown in fig. 3) opposite to the first-mentioned group of components in a back-to-back approximate registration (properly

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aligned as shown in fig. 3), wherein each one of the first-mentioned and said second electronic components has a depth D_b (not shown), and the depth of the housing is D_r (not shown), where D_r is equal to approximately $2D_b$ (inherent relationship).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1 and 3-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Casanova et al.

Casanova teaches an electronic component rack assembly (fig. 2) comprising, in addition to features stated in paragraph 3, hereinabove:

- said rack housing includes a series of pairs of upper and lower component guides (26 and 28, fig. 3), each pair of guides (30, fig. 2) being disposed in vertical alignment with each of the electronic components (shown in fig. 2), and each guide being channel shaped (shown in fig. 2) and having a bight portion (not labeled) and a pair of spaced apart flange portions (shown in fig. 2, not labeled) (claim 4)
- a power distribution unit (38, fig. 2) extending transversely to said vertical planes between the first-mentioned and second electronic components to provide electrical power thereto (one function of a backplane), said unit

- having a series of spaced-apart outlets (shown in figs. 3 and 4, not labeled) for supplying electrical power to individual ones of the electronic components, each of said outlets being spaced from a holder (26, fig. 3) for its electronic component by a distance s (not shown) (claim 5)
- wherein said rack includes a series of pairs of vertically spaced-apart latch openings (only on the edge of 28 are shown in fig. 2, not labeled), for helping to secure said components releasably to said rack, each one of said pairs of openings being disposed in vertical alignment with an outlet (obvious feature, one for each component, not shown) (claim 6)
 - Depth of electronic component being D_b (claim 7)
 - wherein the upper one of said openings is located at a height H_p relative to said unit outlet and defined as the distance between the geometric center of the upper one of said openings to the midpoint of the height of the unit outlet (claims 8 and 15)
 - wherein said openings are spaced horizontally from guides by a spacing S_h being further defined as the distance between the geometric center of lower one of the openings and an inner surface of one of the flanges (claims 9 and 16)
 - wherein the lower one of said openings is located at a height H_h , and H_h is defined as the distance between the geometric center of the lower one of the openings and the outer surface of the bight portion of one of the lower component guides (claim 10)

- wherein where W_r is approximately equal to the width of the rack housing, and where W_b is approximately equal to the width of an electronic component, W_r divided by W_b is approximately equal to an integer value (since $W_r > W_b$, it is inherently that W_r divided by W_b is approximately equal to an integer value) (claim 17)
- a method of making an electronic component rack assembly being disposed in the specification (claim 12).

Casanova fails to teach $W_b \approx 1.93"$, $H_b \approx 19.38"$, $Db \approx 16.8"$, $H_p \approx 1.344"$, $Sh \approx 0.95"$, $H_h \approx 0.46"$, $2Db$ is about 36", and the latch openings having a diameter of about 0.316 inches; and there are not significant reasons or benefits in the specification for selecting such values. It would have been obvious to one having ordinary skill in the art at the time the invention was made to select a appropriate value for the above mentioned dimensions for the device of Casanova, since such a modification would have involved a mere change in the size of a component or part. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

Response to Arguments

6. Applicant's arguments filed June 17, 2004 have been fully considered but they are not persuasive.

Applicant argues, "Casanova does not teach nor suggest forming a rack assembly a width ... about 24 Inches and wherein the depth of the rack housing is equal

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to...approximately 2Db", "the set of cards disposed on each side of the backplane are non-symmetric and offset with respect to each other, and already are not disposed in a back-to-back approximate registration", and "offset A which indicates wasted space".

Firstly, Casanova suggests using an EIA standard rack as indicated in col. 1, lines 30-32; and a 24" rack is one of the EIA standards; secondly, Casanova's electronic components disposed on both sides of the backplane and properly aligned with each other as indicated in figs. 2-5, therefore, they are in a back-to-back approximately registration; and thirdly, Casanova's offset A is designed for increased logic element density as set forth in col. 4, lines 31-68.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Correspondence

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yean-Hsi Chang whose telephone number is (571) 272-2038. The examiner can normally be reached on 07:30-16:00.

If attempts to reach the examiner by telephone are unsuccessful, the Art Unit phone number is (571) 272-2800, ext. 35. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-3431 for regular communications and for After Final communications. There are RightFax numbers and provide the fax sender with an auto-reply fax verifying receipt by the USPTO: Before-Final (703-872-9318) and After-Final (703-872-9319).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-8558.

Yean-Hsi Chang
Patent Examiner
Art Unit: 2835
July 14, 2004

A handwritten signature in cursive script, reading "Yean-Hsi Chang". The signature is written in black ink and is positioned below the typed name and date.